



## Selected Acquisition Report (SAR)

RCS: DD-A&T(Q&A)823-341



### **UH-60M Black Hawk Helicopter (UH-60M Black Hawk)**

As of FY 2017 President's Budget

Defense Acquisition Management  
Information Retrieval  
(DAMIR)

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## Common Acronyms and Abbreviations for MDAP Programs

Acq O&M - Acquisition-Related Operations and Maintenance  
ACAT - Acquisition Category  
ADM - Acquisition Decision Memorandum  
APB - Acquisition Program Baseline  
APPN - Appropriation  
APUC - Average Procurement Unit Cost  
\$B - Billions of Dollars  
BA - Budget Authority/Budget Activity  
Blk - Block  
BY - Base Year  
CAPE - Cost Assessment and Program Evaluation  
CARD - Cost Analysis Requirements Description  
CDD - Capability Development Document  
CLIN - Contract Line Item Number  
CPD - Capability Production Document  
CY - Calendar Year  
DAB - Defense Acquisition Board  
DAE - Defense Acquisition Executive  
DAMIR - Defense Acquisition Management Information Retrieval  
DoD - Department of Defense  
DSN - Defense Switched Network  
EMD - Engineering and Manufacturing Development  
EVM - Earned Value Management  
FOC - Full Operational Capability  
FMS - Foreign Military Sales  
FRP - Full Rate Production  
FY - Fiscal Year  
FYDP - Future Years Defense Program  
ICE - Independent Cost Estimate  
IOC - Initial Operational Capability  
Inc - Increment  
JROC - Joint Requirements Oversight Council  
\$K - Thousands of Dollars  
KPP - Key Performance Parameter  
LRIP - Low Rate Initial Production  
\$M - Millions of Dollars  
MDA - Milestone Decision Authority  
MDAP - Major Defense Acquisition Program  
MILCON - Military Construction  
N/A - Not Applicable  
O&M - Operations and Maintenance  
ORD - Operational Requirements Document  
OSD - Office of the Secretary of Defense  
O&S - Operating and Support  
PAUC - Program Acquisition Unit Cost

PB - President's Budget  
PE - Program Element  
PEO - Program Executive Officer  
PM - Program Manager  
POE - Program Office Estimate  
RDT&E - Research, Development, Test, and Evaluation  
SAR - Selected Acquisition Report  
SCP - Service Cost Position  
TBD - To Be Determined  
TY - Then Year  
UCR - Unit Cost Reporting  
U.S. - United States  
USD(AT&L) - Under Secretary of Defense (Acquisition, Technology and Logistics)

## Program Information

**Program Name**

UH-60M Black Hawk Helicopter (UH-60M Black Hawk)

**DoD Component**

Army

## Responsible Office

COL William D. Jackson  
Utility Helicopters Project Office  
Program Executive Office Aviation  
Redstone Arsenal, AL 35898-5000

[william.d.jackson15.mil@mail.mil](mailto:william.d.jackson15.mil@mail.mil)

**Phone:** 256-955-8938

**Fax:** 256-955-8109

**DSN Phone:** 645-8938

**DSN Fax:** 645-8109

**Date Assigned:** June 18, 2015

## References

**SAR Baseline (Production Estimate)**

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated March 31, 2005

**Approved APB**

Defense Acquisition Executive (DAE) Approved Acquisition Program Baseline (APB) dated June 20, 2011

## Mission and Description

The UH-60M Black Hawk Helicopter (UH-60M Black Hawk) serves as the Army's utility helicopter for the current and Future Force and is in line with the Army's Modernization Strategy, the National Military Strategy, and the National Defense Strategy. The UH-60M Black Hawk is a digital networked platform with greater range and lift to support maneuver commanders through air assault, general support, command and control, and aeromedical evacuation. FRP for this new-build helicopter began in 2007. The UH-60M Black Hawk, with the integrated Medical Evacuation (MEDEVAC) Mission Equipment Package (MEP) kit, provides day/night and adverse weather emergency evacuation of casualties. The integration of the MEDEVAC MEP onto the UH-60M changes the nomenclature to HH-60M.

## Executive Summary

A FY 2016 Congressional plus-up provided funding to procure ten additional UH-60M aircraft for the Army National Guard.

The FY 2017 PB funding position accelerated production by 14 aircraft, bringing total aircraft acceleration quantity to 24 aircraft, and reducing total procurement cost by \$242.5M compared to FY 2016 PB.

Defense Contract Management Agency Plant Representative Evaluation as of December 31, 2015 indicates that the eighth Multi-Year (MY)/Multi-Service contract, (MY VIII) covering the years FY 2012 to FY 2016 was awarded on July 6, 2012. The requirement of this FRP contract is for a total of 566 H-60M aircraft (304 UH-60M and 120 HH-60M for the Army, 18 UH-60M for the U.S. Air Force, 24 UH-60M for the Saudi Arabia National Guard, three UH-60Ms for Thailand, 56 UH-60Ms for Taiwan, 25 UH-60Ms for Mexico, and three UH-60Ms for the Federal Bureau of Investigations, eight UH-60Ms for Tunisia, one UH-60M for Jordan and nine UH-60Ms for Slovakia).

In FY 2015, two additional aircraft were procured as a result of the Blackhawk Exchange and Sales Team program which avoids the divestment (demilitarization) cost and applies H-60 proceeds toward H-60M aircraft via the reimbursable transfer credit to the MY contract.

As of December 31, 2015, a total of 318 MY VIII aircraft (217 UH-60M and 83 HH-60M for the U.S. Army; and 18 UH-60M for the U.S. Air Force) were accepted.

Sikorsky Aircraft Corporation is currently six aircraft behind on the contract delivery schedule.

There are no significant software-related issues with this program at this time.

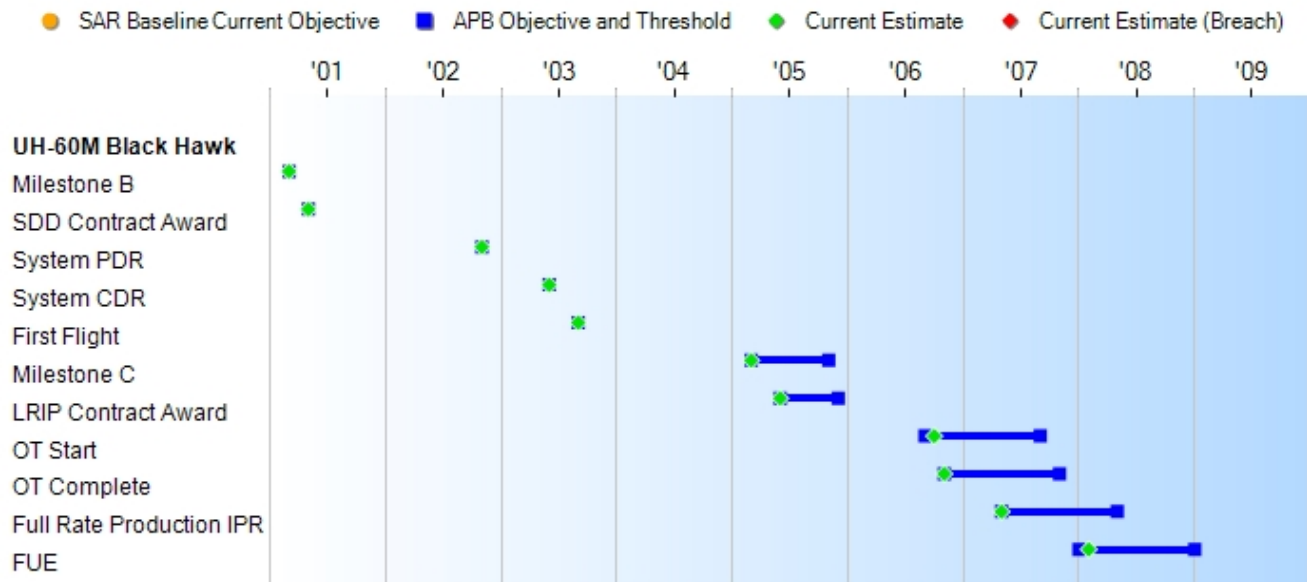
Threshold Breaches

APB Breaches			Explanation of Breach
Schedule		<input type="checkbox"/>	The O&S Cost Breach was previously reported in the December 2013 SAR.
Performance		<input type="checkbox"/>	
Cost	RDT&E	<input type="checkbox"/>	
	Procurement	<input type="checkbox"/>	
	MILCON	<input type="checkbox"/>	
	Acq O&M	<input type="checkbox"/>	
O&S Cost		<input checked="" type="checkbox"/>	
Unit Cost	PAUC	<input type="checkbox"/>	
	APUC	<input type="checkbox"/>	

Nunn-McCurdy Breaches		
Current UCR Baseline		
	PAUC	None
	APUC	None
Original UCR Baseline		
	PAUC	None
	APUC	None



## Schedule



Schedule Events				
Events	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate
Milestone B	Mar 2001	Mar 2001	Mar 2001	Mar 2001
SDD Contract Award	May 2001	May 2001	May 2001	May 2001
System PDR	Nov 2002	Nov 2002	Nov 2002	Nov 2002
System CDR	Jun 2003	Jun 2003	Jun 2003	Jun 2003
First Flight	Sep 2003	Sep 2003	Sep 2003	Sep 2003
Milestone C	Feb 2005	Mar 2005	Nov 2005	Mar 2005
LRIP Contract Award	Mar 2005	Jun 2005	Dec 2005	Jun 2005
OT Start	Sep 2006	Sep 2006	Sep 2007	Oct 2006
OT Complete	Nov 2006	Nov 2006	Nov 2007	Nov 2006
Full Rate Production IPR	May 2007	May 2007	May 2008	May 2007
FUE	Jan 2008	Jan 2008	Jan 2009	Feb 2008

### Change Explanations

None

**Acronyms and Abbreviations**

CDR - Critical Design Review

FUE - First Unit Equipped

IPR - In-Process Review

OT - Operational Test

PDR - Preliminary Design Review

SDD - System Design & Development

## Performance

Performance Characteristics				
SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Demonstrated Performance	Current Estimate
Key Performance Parameters (KPPs)				
Interoperability (meet IERs)				
All	N/A	N/A	N/A	N/A
Net-Ready				
All	All	All Critical	All	All
Survivability IR Signature				
N/A	Existing	Existing	Existing	Existing
Aircraft Survivability Equipment				
N/A	Existing	Existing	Existing	Existing
Survivability Fuel Cells				
N/A	14.5mm	7.62mm	7.62mm	7.62mm
Force Protection Armor Plating				
N/A	14.5mm	7.62mm	7.62mm	7.62mm
External Lift				
Payload				
10,000	10,000	4,500	4,888	4,888
Non-KPPs				
Troop Movement				
Airspeed (Sustained Cruise) (KTAS)				
175	175	145	142.0	145.0
One Engine Inoperative (KTAS)				
100	100	100	TBD	100.0
Combat Radius (w/20 min reserve) (KM)				
500	500	225	225.0	225.6
Vertical Rate of Climb (fpm)				
750	750	500	725	725
Vertical Rate of Climb w/ One Engine Inoperative (fpm)				
200	200	100	TBD	100.0
Internal Lift Capability (290 lbs each)				
11	11	11	11	11
Self-Deploy Range (nautical miles)				

1260	1260	1056	TBD	1071
<b>Ballistic Protection (ground fired armor piercing (mm))</b>				
14.5	14.5	7.62	14.5	14.5
<b>Maintainability (mhrs per flight hr)</b>				
4.6	4.6	5.4	2.3	4.1
<b>Unscheduled mhrs per flight hr</b>				
1.3	1.3	2.1	0.4	1.1
<b>External Lift</b>				
<b>Vertical Rate of Climb (fpm)</b>				
500	500	200	200	200
<b>Combat Radius (w/20 min reserve) (KM)</b>				
275	275	135	135	135

### Requirements Reference

ORD dated January 29, 2007

### Change Explanations

None

### Acronyms and Abbreviations

fpm - feet per minute  
 hr - hour  
 IER - Information Exchange Requirement  
 IR - infrared  
 KM - kilometer  
 KTAS - Knots True Air Speed  
 lbs - pounds  
 mhrs - man-hours  
 min - minutes  
 mm - millimeter  
 w/ - with

## Track to Budget

### RDT&E

Appn	BA	PE
------	----	----

Army 2040 07 0203744A

Project	Name
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504 UH-60M Recapitalization/Modifications (Shared) (Sunk)

### Notes

Only UH-60M Black Hawk and UH-60M Upgrade Technologies (RDT&E only) funds are included in this SAR.

### Procurement

Appn	BA	PE
------	----	----

Army 2031 01 0210101A

Line Item	Name
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A05002 Black Hawk UH-60M (MYP)

Army 2031 02 0210101A

Line Item	Name
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AA0492 Black Hawk UH-60M Upgrade/Recap (Shared) (Sunk)

### Notes

The Aircraft Procurement, Army (APA) Line Item AA0492 is shared with other UH-60M Black Hawk modifications such as Crashworthy External Fuel System, Medical Equipment Package, and other safety modifications. No funds from the AA0492 line are included in this report.

The APA Line Item AA0005 is the parent to the APA Line Item A05002.

## Cost and Funding

### Cost Summary

Total Acquisition Cost							
Appropriation	BY 2005 \$M			BY 2005 \$M	TY \$M		
	SAR Baseline Production Estimate	Current APB Production Objective/Threshold		Current Estimate	SAR Baseline Production Estimate	Current APB Production Objective	Current Estimate
RDT&E	717.5	761.3	837.4	761.3	739.3	780.4	780.4
Procurement	16084.2	21873.7	24061.1	20670.1	20107.8	27314.2	25880.4
Flyaway	--	--	--	19500.9	--	--	24438.1
Recurring	--	--	--	19280.6	--	--	24184.4
Non Recurring	--	--	--	220.3	--	--	253.7
Support	--	--	--	1169.2	--	--	1442.3
Other Support	--	--	--	975.5	--	--	1197.9
Initial Spares	--	--	--	193.7	--	--	244.4
MILCON	0.0	0.0	--	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	--	0.0	0.0	0.0	0.0
Total	16801.7	22635.0	N/A	21431.4	20847.1	28094.6	26660.8

#### Confidence Level

Confidence Level of cost estimate for current APB: 50%

In March, 2011 the Program Office and the Deputy Assistant Secretary of the Army for Cost and Economics (DASA-CE) agreed on an Army Cost Position which was used to establish the APB, dated June 20, 2011. Costs are reflected at the 50% Confidence Level in accordance with the Army Cost and Economic Analysis Program, Army Regulation 11-18.

It is difficult to calculate mathematically the precise confidence levels associated with life cycle cost estimates prepared for MDAPs. Based on the rigor in methods used in building estimates, the strong adherence to the collection and use of historical cost information, and the review of applied assumptions, we project that it is about equally likely that the estimate will prove too low or too high for execution of the program described.

Total Quantity			
Quantity	SAR Baseline Production Estimate	Current APB Production	Current Estimate
RDT&E	8	8	8
Procurement	1227	1367	1367
Total	1235	1375	1375

## Cost and Funding

### Funding Summary

Appropriation Summary									
FY 2017 President's Budget / December 2015 SAR (TY\$ M)									
Appropriation	Prior	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
RDT&E	780.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	780.4
Procurement	13361.8	1701.8	929.3	1129.7	1226.4	1012.3	1235.2	5283.9	25880.4
MILCON	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Acq O&M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PB 2017 Total	14142.2	1701.8	929.3	1129.7	1226.4	1012.3	1235.2	5283.9	26660.8
PB 2016 Total	14146.9	1563.0	1263.1	1182.4	943.1	960.5	1104.8	5739.5	26903.3
Delta	-4.7	138.8	-333.8	-52.7	283.3	51.8	130.4	-455.6	-242.5

Quantity Summary										
FY 2017 President's Budget / December 2015 SAR (TY\$ M)										
Quantity	Undistributed	Prior	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	To Complete	Total
Development	8	0	0	0	0	0	0	0	0	8
Production	0	766	107	36	60	69	38	65	226	1367
PB 2017 Total	8	766	107	36	60	69	38	65	226	1375
PB 2016 Total	8	766	94	60	72	37	38	47	253	1375
Delta	0	0	13	-24	-12	32	0	18	-27	0

## Cost and Funding

### Annual Funding By Appropriation

Annual Funding							
2040   RDT&E   Research, Development, Test, and Evaluation, Army							
Fiscal Year	Quantity	TY \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2000	--	--	--	--	--	--	9.5
2001	--	--	--	--	--	--	28.8
2002	--	--	--	--	--	--	55.9
2003	--	--	--	--	--	--	96.8
2004	--	--	--	--	--	--	144.8
2005	--	--	--	--	--	--	99.8
2006	--	--	--	--	--	--	106.6
2007	--	--	--	--	--	--	117.5
2008	--	--	--	--	--	--	84.9
2009	--	--	--	--	--	--	30.8
2010	--	--	--	--	--	--	5.0
Subtotal	8	--	--	--	--	--	780.4



Annual Funding 2040   RDT&E   Research, Development, Test, and Evaluation, Army							
Fiscal Year	Quantity	BY 2005 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2000	--	--	--	--	--	--	10.2
2001	--	--	--	--	--	--	30.5
2002	--	--	--	--	--	--	58.6
2003	--	--	--	--	--	--	99.5
2004	--	--	--	--	--	--	145.4
2005	--	--	--	--	--	--	97.4
2006	--	--	--	--	--	--	101.3
2007	--	--	--	--	--	--	109.0
2008	--	--	--	--	--	--	77.3
2009	--	--	--	--	--	--	27.7
2010	--	--	--	--	--	--	4.4
Subtotal	8	--	--	--	--	--	761.3

FY 2010 - FY 2011 RDT&E includes funding for the Fly-By-Wire flight test program which is no longer a part of the acquisition program as directed in the February 18, 2010 ADM; subsequent reports reflect the direction of the ADM.

Annual Funding 2031   Procurement   Aircraft Procurement, Army							
Fiscal Year	Quantity	TY \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2004	--	--	13.5	--	13.5	--	13.5
2005	5	82.5	6.1	5.6	94.2	2.8	97.0
2006	17	241.3	7.5	4.5	253.3	15.2	268.5
2007	72	1086.3	85.8	45.4	1217.5	54.4	1271.9
2008	77	1144.4	85.3	63.3	1293.0	61.6	1354.6
2009	66	962.3	92.0	9.0	1063.3	48.2	1111.5
2010	84	1182.5	172.0	4.5	1359.0	124.2	1483.2
2011	99	1512.5	131.4	36.2	1680.1	108.8	1788.9
2012	89	1298.0	174.5	35.9	1508.4	189.1	1697.5
2013	100	1263.9	179.6	3.7	1447.2	130.3	1577.5
2014	70	980.7	171.1	1.2	1153.0	76.0	1229.0
2015	87	1211.3	181.1	3.4	1395.8	72.9	1468.7
2016	107	1425.5	186.3	4.2	1616.0	85.8	1701.8
2017	36	675.5	192.4	10.6	878.5	50.8	929.3
2018	60	839.5	202.7	14.0	1056.2	73.5	1129.7
2019	69	953.0	211.9	2.4	1167.3	59.1	1226.4
2020	38	749.6	209.9	0.7	960.2	52.1	1012.3
2021	65	973.8	223.6	4.7	1202.1	33.1	1235.2
2022	50	918.4	227.4	0.9	1146.7	44.0	1190.7
2023	50	752.0	228.3	1.0	981.3	33.7	1015.0
2024	50	881.6	238.3	1.0	1120.9	37.9	1158.8
2025	50	827.5	242.9	1.0	1071.4	34.9	1106.3
2026	26	477.3	237.2	0.5	715.0	39.3	754.3
2027	--	--	44.2	--	44.2	14.6	58.8
Subtotal	1367	20439.4	3745.0	253.7	24438.1	1442.3	25880.4

Annual Funding 2031   Procurement   Aircraft Procurement, Army							
Fiscal Year	Quantity	BY 2005 \$M					
		End Item Recurring Flyaway	Non End Item Recurring Flyaway	Non Recurring Flyaway	Total Flyaway	Total Support	Total Program
2004	--	--	13.4	--	13.4	--	13.4
2005	5	79.6	5.8	5.4	90.8	2.7	93.5
2006	17	226.6	7.0	4.2	237.8	14.3	252.1
2007	72	999.9	78.9	41.8	1120.6	50.1	1170.7
2008	77	1036.9	77.2	57.4	1171.5	55.8	1227.3
2009	66	859.5	82.2	8.0	949.7	43.1	992.8
2010	84	1038.2	150.9	4.0	1193.1	109.1	1302.2
2011	99	1304.2	113.3	31.2	1448.7	93.8	1542.5
2012	89	1100.6	148.0	30.4	1279.0	160.3	1439.3
2013	100	1052.9	149.6	3.1	1205.6	108.5	1314.1
2014	70	804.6	140.3	1.0	945.9	62.4	1008.3
2015	87	978.9	146.4	2.7	1128.0	58.9	1186.9
2016	107	1137.2	148.6	3.4	1289.2	68.4	1357.6
2017	36	528.8	150.6	8.3	687.7	39.8	727.5
2018	60	644.4	155.7	10.7	810.8	56.4	867.2
2019	69	717.2	159.5	1.8	878.5	44.5	923.0
2020	38	553.1	154.9	0.5	708.5	38.4	746.9
2021	65	704.4	161.8	3.4	869.6	23.9	893.5
2022	50	651.3	161.3	0.6	813.2	31.2	844.4
2023	50	522.8	158.8	0.7	682.3	23.4	705.7
2024	50	600.9	162.5	0.7	764.1	25.8	789.9
2025	50	553.0	162.3	0.7	716.0	23.3	739.3
2026	26	312.7	155.5	0.3	468.5	25.7	494.2
2027	--	--	28.4	--	28.4	9.4	37.8
Subtotal	1367	16407.7	2872.9	220.3	19500.9	1169.2	20670.1

On May 18, 2010, the Aviation Synchronization Conference Council of Colonels recommended the Army Acquisition Objective increase from 1,227 to 1,365. Two additional aircraft were procured in the upgrade configuration. These two aircraft will not be fielded.

## Low Rate Initial Production

Item	Initial LRIP Decision	Current Total LRIP
Approval Date	3/31/2005	3/31/2005
Approved Quantity	40	40
Reference	Milestone C ADM	Milestone C ADM
Start Year	2005	2005
End Year	2007	2007

The Milestone C ADM, dated March 31, 2005, contained approval for production of up to 40 LRIP aircraft and approval to award an Advance Procurement contract for the first lot of FRP aircraft.

## Foreign Military Sales

Country	Date of Sale	Quantity	Total Cost \$M	Description
Jordan	6/19/2015	1	17.2	Case Number JO-N-YAT
Slovakia	4/21/2015	9	170.1	Case Number LO-B-UCI
Tunisia	1/12/2015	8	114.7	Case Number TU-B-USS
Mexico	8/8/2014	7	163.6	Case Number MX-B-UEU
Mexico	7/22/2014	18	462.2	Case Number MX-B-UES
Thailand	9/25/2012	1	31.0	Case Number TH-B-UAD
Thailand	12/26/2011	2	62.3	Case Number TH-B-UAE
Saudi Arabia	11/30/2011	24	638.3	Case Number SI-B-WXP
Sweden	1/14/2011	15	275.7	Case Number SW-B-WAD
Taiwan	11/22/2010	60	1717.7	Case Number TW-B-YZC
Jordan	9/1/2010	2	26.3	Case Number JO-B-WAT
Mexico	8/3/2010	3	83.9	Case Number MX-B-UEJ
United Arab Emirates	12/12/2007	40	825.0	Case Number AE-B-ZUE
Bahrain	9/18/2007	9	151.9	Case Number BA-B-UIR

### Notes

To date all FMS have been for the UH-60M Black Hawk configuration of the aircraft. The Total Cost reflects all costs associated with the procurement of the aircraft and other services provided to the specific country to include training, spares, et cetera.

## Nuclear Costs

None

## Unit Cost

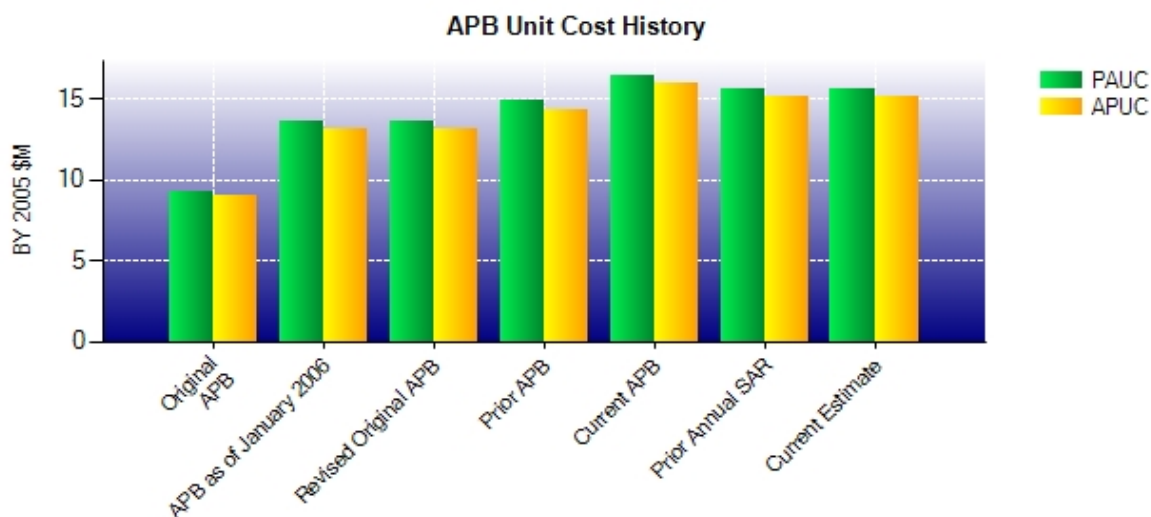
### Unit Cost Report

Item	BY 2005 \$M	BY 2005 \$M	% Change
	Current UCR Baseline (Jun 2011 APB)	Current Estimate (Dec 2015 SAR)	
Program Acquisition Unit Cost			
Cost	22635.0	21431.4	
Quantity	1375	1375	
Unit Cost	16.462	15.586	-5.32
Average Procurement Unit Cost			
Cost	21873.7	20670.1	
Quantity	1367	1367	
Unit Cost	16.001	15.121	-5.50

Item	BY 2005 \$M	BY 2005 \$M	% Change
	Revised Original UCR Baseline (Mar 2005 APB)	Current Estimate (Dec 2015 SAR)	
Program Acquisition Unit Cost			
Cost	16801.7	21431.4	
Quantity	1235	1375	
Unit Cost	13.605	15.586	+14.56
Average Procurement Unit Cost			
Cost	16084.2	20670.1	
Quantity	1227	1367	
Unit Cost	13.109	15.121	+15.35



# Unit Cost History



Item	Date	BY 2005 \$M		TY \$M	
		PAUC	APUC	PAUC	APUC
Original APB	Feb 2002	9.250	9.042	12.008	11.812
APB as of January 2006	Mar 2005	13.605	13.109	16.880	16.388
Revised Original APB	Mar 2005	13.605	13.109	16.880	16.388
Prior APB	Feb 2007	14.872	14.338	18.840	18.319
Current APB	Jun 2011	16.462	16.001	20.432	19.981
Prior Annual SAR	Dec 2014	15.630	15.165	19.566	19.110
Current Estimate	Dec 2015	15.586	15.121	19.390	18.932

## SAR Unit Cost History

Initial SAR Baseline to Current SAR Baseline (TY \$M)									
Initial PAUC Development Estimate	Changes								PAUC Production Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
12.008	-0.325	4.705	-0.262	0.996	-0.326	0.000	0.084	4.872	16.880

Current SAR Baseline to Current Estimate (TY \$M)									
PAUC Production Estimate	Changes								PAUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
16.880	-0.265	0.677	0.938	0.476	0.147	0.000	0.537	2.510	19.390

Initial SAR Baseline to Current SAR Baseline (TY \$M)									
Initial APUC Development Estimate	Changes								APUC Production Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
11.812	-0.324	4.469	-0.287	0.987	-0.354	0.000	0.085	4.576	16.388

Current SAR Baseline to Current Estimate (TY \$M)									
APUC Production Estimate	Changes								APUC Current Estimate
	Econ	Qty	Sch	Eng	Est	Oth	Spt	Total	
16.388	-0.270	0.728	0.924	0.481	0.140	0.000	0.541	2.544	18.932

SAR Baseline History				
Item	SAR Planning Estimate	SAR Development Estimate	SAR Production Estimate	Current Estimate
Milestone A	N/A	N/A	N/A	N/A
Milestone B	N/A	Apr 2001	Mar 2001	Mar 2001
Milestone C	N/A	Mar 2004	Feb 2005	Mar 2005
FUE	N/A	Sep 2006	Jan 2008	Feb 2008
Total Cost (TY \$M)	N/A	14662.0	20847.1	26660.8
Total Quantity	N/A	1221	1235	1375
PAUC	N/A	12.008	16.880	19.390

## Cost Variance

Summary TY \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	739.3	20107.8	--	20847.1
Previous Changes				
Economic	+3.9	-247.1	--	-243.2
Quantity	--	+3291.3	--	+3291.3
Schedule	+27.5	+1388.7	--	+1416.2
Engineering	-2.1	+657.2	--	+655.1
Estimating	+11.8	+159.2	--	+171.0
Other	--	--	--	--
Support	--	+765.8	--	+765.8
Subtotal	+41.1	+6015.1	--	+6056.2
Current Changes				
Economic	--	-121.4	--	-121.4
Quantity	--	--	--	--
Schedule	--	-125.9	--	-125.9
Engineering	--	--	--	--
Estimating	--	+31.6	--	+31.6
Other	--	--	--	--
Support	--	-26.8	--	-26.8
Subtotal	--	-242.5	--	-242.5
Total Changes	+41.1	+5772.6	--	+5813.7
CE - Cost Variance	780.4	25880.4	--	26660.8
CE - Cost & Funding	780.4	25880.4	--	26660.8

Summary BY 2005 \$M				
Item	RDT&E	Procurement	MILCON	Total
SAR Baseline (Production Estimate)	717.5	16084.2	--	16801.7
Previous Changes				
Economic	--	--	--	--
Quantity	--	+2330.0	--	+2330.0
Schedule	+24.1	+945.4	--	+969.5
Engineering	+9.5	+529.3	--	+538.8
Estimating	+10.2	+236.3	--	+246.5
Other	--	--	--	--
Support	--	+604.9	--	+604.9
Subtotal	+43.8	+4645.9	--	+4689.7
Current Changes				
Economic	--	--	--	--
Quantity	--	--	--	--
Schedule	--	-66.4	--	-66.4
Engineering	--	--	--	--
Estimating	--	+25.9	--	+25.9
Other	--	--	--	--
Support	--	-19.5	--	-19.5
Subtotal	--	-60.0	--	-60.0
Total Changes	+43.8	+4585.9	--	+4629.7
CE - Cost Variance	761.3	20670.1	--	21431.4
CE - Cost & Funding	761.3	20670.1	--	21431.4

Previous Estimate: December 2014

Procurement	\$M	
Current Change Explanations	Base Year	Then Year
Revised escalation indices. (Economic)	N/A	-121.4
Adjustment for current and prior escalation. (Estimating)	+25.9	+31.6
Acceleration of procurement buy profile from FY 2016 through FY 2021. (Schedule)	0.0	-40.7
Additional schedule variance related to the buy profile unit cost computations. (Schedule)	-66.4	-85.2
Adjustment for current and prior escalation. (Support)	+1.6	+2.1
Decrease in Other Support due to acceleration of procurement buy profile which reduced out-year fieldings. (Support)	-15.2	-20.2
Decrease in Initial Spares due to acceleration of procurement buy profile which reduced spares requirement. (Support)	-5.9	-8.7
Procurement Subtotal	-60.0	-242.5

## Contracts

### Contract Identification

**Appropriation:** Procurement  
**Contract Name:** Multi-Year/Multi-Service 8  
**Contractor:** Sikorsky Aircraft Corporation  
**Contractor Location:** 6900 Main St  
 Stratford, CT 06614  
**Contract Number:** W58RGZ-12-C-0008  
**Contract Type:** Firm Fixed Price (FFP)  
**Award Date:** July 06, 2012  
**Definitization Date:** July 06, 2012

### Contract Price

Initial Contract Price (\$M)			Current Contract Price (\$M)			Estimated Price At Completion (\$M)	
Target	Ceiling	Qty	Target	Ceiling	Qty	Contractor	Program Manager
4347.5	N/A	354	5091.9	N/A	424	5091.9	5091.9

### Target Price Change Explanation

The difference between the Initial Contract Price Target and the Current Contract Price Target is due to purchase of additional aircraft.

### Cost and Schedule Variance Explanations

Cost and Schedule Variance reporting is not required on this (FFP) contract.

### Notes

This information includes only the Army portion of the current Multi-Year 8 contract.

Initial Target Price and Quantity were updated to correct an administrative error.

## Deliveries and Expenditures

Deliveries				
Delivered to Date	Planned to Date	Actual to Date	Total Quantity	Percent Delivered
Development	8	8	8	100.00%
Production	724	718	1367	52.52%
Total Program Quantity Delivered	732	726	1375	52.80%

Expended and Appropriated (TY \$M)			
Total Acquisition Cost	26660.8	Years Appropriated	17
Expended to Date	14809.1	Percent Years Appropriated	60.71%
Percent Expended	55.55%	Appropriated to Date	15844.0
Total Funding Years	28	Percent Appropriated	59.43%

The above data is current as of February 29, 2016.

## Operating and Support Cost

### Cost Estimate Details

Date of Estimate:	March 07, 2016
Source of Estimate:	POE
Quantity to Sustain:	1365
Unit of Measure:	Aircraft
Service Life per Unit:	25.00 Years
Fiscal Years in Service:	FY 2006 - FY 2051

A total of 1,375 UH/HH aircraft will be procured with 1,365 fielded and sustained. The original eight RDT&E-funded prototype aircraft and two procurement aircraft in upgrade configuration will not be fielded or sustained. The two aircraft in the upgrade configuration are test aircraft.

### Sustainment Strategy

The maintenance concept for the UH-60M Black Hawk is organic, two-level maintenance with the exception of the training base. The training base will continue as Contractor Logistics Support.

### Antecedent Information

The antecedent system is UH-60L Black Hawk. The total O&S Costs for UH-60L Black Hawk were not reported in the last UH-60L Black Hawk SAR dated December 31, 1999. The information in the O&S Cost Table is based on O&S Management Information Systems (OSMIS) data for the UH-60L Black Hawk (excluding Contingency Operations). Sustaining support costs for the UH-60L Black Hawk aircraft are not included in the table because the costs (software maintenance, system specific base operations, systems engineering/program management and transportation) are not collected in the OSMIS database. There are 780 UH-60L Black Hawks in the current fleet with an Economic Useful Life expectancy of 25-years.

Annual O&S Costs BY2005 \$K		
Cost Element	UH-60M Black Hawk Average Annual Cost Per Aircraft	UH-60L Black Hawk (Antecedent) Avg Annual Cost Per Aircraft
Unit-Level Manpower	426.285	426.285
Unit Operations	54.142	54.142
Maintenance	373.395	284.669
Sustaining Support	1.225	0.000
Continuing System Improvements	6.157	0.000
Indirect Support	215.849	215.849
Other	0.000	0.000
Total	1077.053	980.945



Item	Total O&S Cost \$M			
	UH-60M Black Hawk		UH-60L Black Hawk (Antecedent)	
	Current Production APB Objective/Threshold	Current Estimate		
<b>Base Year</b>	17652.5	19417.8	<b>36754.4<sup>1</sup></b>	N/A
<b>Then Year</b>	26086.5	N/A	57989.3	N/A

<sup>1</sup> APB O&S Cost Breach

The current O&S cost in the UH-60M Black Hawk APB dated June 2011 represents O&M costs not O&S costs. The key difference between the two is that O&M costs do not include Military Personnel costs. Also the Current Estimate includes the extension of Expected Useful Life from 20 years to 25 years.

#### Equation to Translate Annual Cost to Total Cost

Equation: Average Annual Cost Per Aircraft \* Quantity Fielded \* System Life

\$1.077053M \* 1365 aircraft \* 25 years = \$36,754.4 (BY 2005 \$M)

O&S Cost Variance		
Category	BY 2005 \$M	Change Explanations
Prior SAR Total O&S Estimates - Dec 2014 SAR	36745.5	
Programmatic/Planning Factors	8.9	Adjustments due to changes in the flying hour profile.
Cost Estimating Methodology	0.0	
Cost Data Update	0.0	
Labor Rate	0.0	
Energy Rate	0.0	
Technical Input	0.0	
Other	0.0	
Total Changes	8.9	
Current Estimate	36754.4	

#### Disposal Estimate Details

**Date of Estimate:** March 07, 2016

**Source of Estimate:** POE

**Disposal/Demilitarization Total Cost (BY 2005 \$M):** Total costs for disposal of all Aircraft are 75.5